Features of Basic AlliedWare™

Standard features:

Point-to-Point Protocol (PPP)	PPPoE
Internet Protocol (IP)	IP Multicasting
RIP	Open Shortest Path First (OSPF)
Test Facility	Network Time Protocol (NTP)
Generic Routing Encapsulation	Trigger Facility
Logging Facility	Scripting
HTTP Server	HTTP Client
TFTP Client	TCP
Command Line Interface (CLI)	Dynamic Host Configuration Protocol (DHCP)
Layer 2 Tunneling Protocol (L2TP)	Simple Network Management Protocol (SNMP)
Compression Service	Internet Group Management Protocol (IGMP)
ISAKMP	Secure Shell (SSH)

Product specific features:

Allied Telesyn product series	AT-AR300	AT-AR400	AT-AR700	Rapier	Rapier 'i'	AT-9800	AT-SB4000	AT-8700XL
Generic Attribution Registration Protocol (GARP)				•	•	•	•	•
General Packet Classifier				•	•	•	•	•
Quality of Service					•	•	•	•
Frame Relay	•	•	•	•	•			
Integrated Services Digital Network (ISDN)	•	•	•	•	•			
X.25	•	•	•	•	•			
Synchronous Tunneling (STT)	•	•	•	•	•			
Novell IPX	•	•	•			•	•	
DECnet	•	•	•					
Terminal Server	•	•	•	•	•			•
Printer Server	•	•	•	•	•			•
Bridging	•	•	•					
Asynchronous Call Control (ACC)	•	•	•	•	•			
AppleTalk	•	•	•					
Time Division Multiplexing (TDM)	•	•	•	•	•			
Telephony Services	•							
Graphical User Interface (GUI)		•	•	•	•	•	•	•
VLAN		•		•	•	•	•	•
STP				•	•	•	•	•
RSTP				•	•	•	•	•
Transaction Packet Assembler Disassembler (TPAD)	•	•	•	•	•			
Resource Reservation Protocol (RSVP)	•	•	•					
Encryption Service	•	•	•	•	•			
IP Security (IPSec)	•	•	•	•	•			
Virtual Router Redundancy Protocol (VRRP)	•	•	•	•	•			
Open Systems Interconnection (OSI)	•	•	•					
Secure Sockets Layer (SSL)		•	•	•	•	•	•	•
IGMP PROXY	•	•	•	•	•			•
PIM-SM	•	•	•					
PIM-DM	•	•	•					
DVMRP	•	•	•					
Compact Flash				•		•		

Note:
• = Feature is available in base release of this product. (Feature licenses are not included in this matrix).

AlliedWare, Layer 3 Fully Featured Operating System

AlliedWare™ is Allied Telesyn's feature-rich OS that serves as the foundation for its entire line of Layer 3 switches and routers. It not only includes all the functionality, management capabilities and performance today's networks demand, but as a standards-based implementation, it also assures full interoperability with all other major network equipment vendors allowing operational investment protection for training, management and monitoring. The table to the left lists the standard features included in all Allied Telesyn Layer 3 switches and routers.

STATEFUL INSPECTION FIREWALL

Allied Telesyn's state-of-the-art ICSA-certified Stateful Inspection firewall provides the highest level of security possible by providing full application-layer awareness without breaking the client/server model. Stateful Inspection extracts the state-related information required for security decisions from all application layers and maintains this information in dynamic state tables for evaluating subsequent connection attempts. It protects against a wide range of Denial of Service (DoS) attacks including Ping of Death, SYN/FIN flooding, Smurf attacks, port scans, fragment attacks and IP spoofing. E-mail alerts are automatically triggered when such attacks are detected. This provides a solution that is highly secure and offers maximum performance, scalability, and extensibility.

APPLICATION GATEWAYS (SMTP PROXY, HTTP PROXY)

SMTP Proxy inspects SMTP packets as they pass through the firewall. By accepting or rejecting packets based on source and destination address rules, abuse of e-mail servers is limited. Typical forms of e-mail abuse include receipt of unwanted advertisements, spam, and unauthorized forwarding of mail. HTTP proxy inspects and filters outbound HTTP sessions as they pass through the firewall. The Proxy can inspect URLs and restrict cookie activity.

ABOUT ALLIED TELESYN

Allied Telesyn leads the world in network technologies for the access edge. Since the company's inception in 1987, Allied Telesyn has been developing IP-based network products for use in video, voice and data networks at the metro edge, in education, government agencies and across the enterprise. Allied Telesyn's access, aggregation and core transport technologies range from simple Ethernet adapters, hubs and media converters to robust multi-layer Gigabit Ethernet switches and routers, wireless systems, DTM and WDM transport solutions for delivering real-time voice, video and data. Allied Telesyn's comprehensive support and professional service programs are suited to meet the growing demands of today's switched broadband infrastructures.

SERVICE & SUPPORT

Allied Telesyn provides value-added support services for its customers under its Net.Cover℠ programs. For more information on Net.Cover℠ support programs available in your area, contact your Allied Telesyn sales representative or visit our website.

www.alliedtelesyn.com

SOFTWARE PRODUCTS

Allied Telesyn

BGP4

External gateway protocol which allows two routers in different routing domains, known as Autonomous Systems (AS), to exchange routing information, thereby facilitating the forwarding of data across the border of the routing domains. BGP allows routers to learn multiple paths, choose the best path for routing information and install that path in the IP routing table.

RSVP

RSVP is a signaling protocol designed to provide guaranteed QoS (Quality of Service) for network traffic. To allow hosts and applications that do not support RSVP to take advantage of RSVP services, AlliedWare™ implements a RSVP proxy agent.

DVMRP

DVMRP is an Internet routing protocol that provides an efficient mechanism for connectionless datagram delivery to a group of hosts across an internetwork. It uses a distance vector distributed routing algorithm to dynamically generate and maintain IP Multicast delivery trees.

AlliedWare™ supports DVMRP version 3 as specified in Internet Draft "Distance Vector Multicast Routing Protocol Version 3", September 1999 (draft-ietf-idmr-dvmrp-v3-09).

PIM-DENSE MODE (DM)

PIM-DM is similar to DVMRP in that it employs the RPM algorithm, however, PIM-DM relies on the presence of an existing unicast routing protocol to provide routing table information to build up information for the multicast forwarding database but is independent of the mechanisms of the specific unicast routing protocol. In contrast, DVMRP contains an integrated routing protocol that makes use of its own RIP-like exchanges to compute the required unicast information.

PIM-SPARSE MODE (SM)

PIM-SM provides efficient communication between members of sparsely distributed groups - the type of groups that are most common in wide-area internetworks. PIM-SM is designed to limit multicast traffic so that only those network devices interested in receiving traffic for a particular group receive the traffic.

IPv6

IPv6 is the next generation of the Internet Protocol (IP). It has primarily been developed to solve the problem of the eventual exhaustion of the IPv4 address space, but also offers other enhancements:

- Addresses are 16Bytes long in contrast to IPv4's 4Byte addresses.
- Globally unique addresses with more levels of addressing hierarchy, to reduce the size of routing tables.
- Auto-configuration of addresses by hosts.
- Improved scalability of multicast routing, by adding a 'scope' field to multicast addresses.
- A new type of address, the 'anycast address,' which is used to send a packet to any one of a group of devices.

IS-IS

Intermediate-to-Intermediate System is an OSI routing protocol for dynamic routing between intermediate and end network devices.

LOAD BALANCER

Load Balancing increases network efficiency by distributing network loads across defined resource pools, such as firewalls, servers or other network equipment allowing network managers to control load distribution. For example, a load balancer can monitor incoming HTTP traffic and distribute it evenly or preferentially across multiple servers.

The load balancing enables feature-rich Layer 3 to 7 load balancing on the user's existing switch or router providing an economical alternative to dedicated load balancing hardware. With up to 32 virtual load balancers, each device can balance the load on up to 32 different resource pools with four fundamental types of load balancing:

- TCP load balancing. Examines the IP address of packets and balances TCP services.
- Route-based load balancing. Ideal for balancing multiple firewalls.
- HTTP load balancing. These load balancers are ideal for balancing web servers.
- SSL load balancing. These load balancers balance secure traffic.

UPGRADE FEATURES

Software	AT-AR300	AT-AR400	AT-AR700	Rapier	Rapier 'i'	AT-9800	AT-SB4000	AT-8700XL
Full L3	N/A	N/A	N/A	IPX Routing Appletalk RSVP PIM DM DVMRP PIM SM	IPX Routing Appletalk RSVP PIM DM DVMRP PIM SM	Appletalk RSVP PIM DM DVMRP PIM SM VRRP	Appletalk RSVP PIM DM DVMRP PIM SM VRRP	N/A
Advanced L3	N/A	IPv6 BGP4 MPLS (when released) Load balancing	IPv6 BGP4 MPLS (when released) Load balancing	IPv6 BGP4 MPLS (when released) Load balancing	IPv6 BGP4 MPLS (when released) Load balancing	IPv6 BGP4 MPLS (when released) Load balancing OSI	IPv6 BGP4 MPLS (when released) Load balancing OSI	N/A
Security Package includes Firewall, SMTP Proxy and HTTP Proxy								N/A

Note: Basic L2/L3 software ships with the product.

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